

SEQUENCE LISTING

<110> Mitsui Chemicals, Inc.

<120> A process for the preparation of a chiral compound of hydroxyl aldehyde

<130> P0002976

<160> 8

<210> 1

<211> 747

<212> DNA

<213> *Thermotoga maritima*

<220>

<221> CDS

<222> (1)... (744)

<400> 1

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ttc tac gaa ttc aag ccc gtc aga gaa agc gca ggt att gaa gat	90
Phe Tyr Glu Phe Lys Pro Val Arg Glu Ser Ala Gly Ile Glu Asp	
20 25 30	

gtg aaa agt gct ata gag cac acg aat ctg aaa ccg ttt gcc aca	135
Val Lys Ser Ala Ile Glu His Thr Asn Leu Lys Pro Phe Ala Thr	
35 40 45	

cca gac gat ata aaa aaa ctc tgt ctt gaa gca agg gaa aat cgt	180
Pro Asp Asp Ile Lys Lys Leu Cys Leu Glu Ala Arg Glu Asn Arg	
50 55 60	

ttc cat gga gtc tgt gtg aat ccg tgt tat gtg aaa ctg gct cgt	225
Phe His Gly Val Cys Val Asn Pro Cys Tyr Val Lys Leu Ala Arg	
65 70 75	

gaa gaa ctc gaa gga acc gat gtg aaa gtc gtc acc gtt gtt ggt	270
Glu Glu Leu Glu Gly Thr Asp Val Lys Val Val Thr Val Val Gly	
80 85 90	

ttt cca ctg gga gcg aac gaa act cgg acg aaa gcc cat gag gcg	315
Phe Pro Leu Gly Ala Asn Glu Thr Arg Thr Lys Ala His Glu Ala	
95 100 105	

att ttc gct gtt gag agt gga gcc gat gag atc gat atg gtc atc	360
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Ile Phe Ala Val Glu Ser Gly Ala Asp Glu Ile Asp Met Val Ile	
110 115 120	
aac gtt ggc atg ctc aag gca aag gag tgg gag tac gtt tac gag	405
Asn Val Gly Met Leu Lys Ala Lys Glu Trp Glu Tyr Val Tyr Glu	
125 130 135	
gat ata aga agt gtt gtc gaa tog gtg aaa gga aaa gtt gtg aag	450
Asp Ile Arg Ser Val Val Glu Ser Val Lys Gly Lys Val Val Lys	
140 145 150	
gtg atc atc gaa acg tgc tat ctg gat acg gaa gag aag ata gcg	495
Val Ile Ile Glu Thr Cys Tyr Leu Asp Thr Glu Glu Lys Ile Ala	
155 160 165	
gcg tgt gtc att tcc aaa ctt got gga gct cat ttc gtg aag act	540
Ala Cys Val Ile Ser Lys Leu Ala Gly Ala His Phe Val Lys Thr	
170 175 180	
tcc acg gga ttt gga aca gga ggg gcg acc gca gaa gac gtt cat	585
Ser Thr Gly Phe Gly Thr Gly Gly Ala Thr Ala Glu Asp Val His	
185 190 195	
ctc atg aaa tgg atc gtg gga gat gag atg ggt gta aaa gct tcc	630
Leu Met Lys Trp Ile Val Gly Asp Glu Met Gly Val Lys Ala Ser	
200 205 210	
gga ggg atc aga acc ttc gag gac gct gtt aaa atg atc atg tac	675
Gly Gly Ile Arg Thr Phe Glu Asp Ala Val Lys Met Ile Met Tyr	
215 220 225	
ggt gct gat aga ata gga acg agt tog gga gtt aag atc gtt cag	720
Gly Ala Asp Arg Ile Gly Thr Ser Ser Gly Val Lys Ile Val Gln	
230 235 240	
ggg gga gaa gag aga tat gga ggt tga	747
Gly Gly Glu Glu Arg Tyr Gly Gly	
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<210> 2

<211> 681

<212> DNA

<213> Pyrobaculum aerophilum

<220>

<221> CDS

<222> (1)... (678)

<400> 2

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gtc gcg gcg tat tgc gta aat ccc ata tac gcc cct gtt gtt cgg Val Ala Ala Tyr Cys Val Asn Pro Ile Tyr Ala Pro Val Val Arg 35 40 45	135
cct ttg ttg cgg aaa gta aag ctc tgc gta gtg gcg gac ttc ccc Pro Leu Leu Arg Lys Val Lys Leu Cys Val Val Ala Asp Phe Pro 50 55 60	180
ttt ggg gcc ttg cca acg gcc agc aga att gcc ttg gtt tct agg Phe Gly Ala Leu Pro Thr Ala Ser Arg Ile Ala Leu Val Ser Arg 65 70 75	225
ctt gct gaa gtg gca gat gag ata gac gtg gtg gcg cct ata gcc Leu Ala Glu Val Ala Asp Glu Ile Asp Val Val Ala Pro Ile Gly 80 85 90	270
ctc gtg aaa tog cgg agg tgg gcc gag gtg aga agg gac tta ata Leu Val Lys Ser Arg Arg Trp Ala Glu Val Arg Arg Asp Leu Ile 95 100 105	315
agc gtt gtg ggt gcc gca ggc ggg aga gtg gta aag gta atc aca Ser Val Val Gly Ala Ala Gly Gly Arg Val Val Lys Val Ile Thr 110 115 120	360
gag gag cct tat cta agg gat gag gag agg tat acg ctt tac gac Glu Glu Pro Tyr Leu Arg Asp Glu Glu Arg Tyr Thr Leu Tyr Asp 125 130 135	405
att att gca gag gct ggg gcc cac ttt ata aaa agc tcc act gga Ile Ile Ala Glu Ala Gly Ala His Phe Ile Lys Ser Ser Thr Gly 140 145 150	450
ttc gcc gaa gag gcc tac gcc gcc aga cag gga aat cct gta cac Phe Ala Glu Glu Ala Tyr Ala Ala Arg Gln Gly Asn Pro Val His 155 160 165	495
tca acg ccg gag agg gcg gcg gca att gcc cgc tac ata aaa gag Ser Thr Pro Glu Arg Ala Ala Ala Ile Ala Arg Tyr Ile Lys Glu 170 175 180	540

aag ggg tat aga ctg ggg gtg aaa atg gcg ggg ggg att agg aca 585
 Lys Gly Tyr Arg Leu Gly Val Lys Met Ala Gly Gly Ile Arg Thr
 185 190 195

agg gag cag gca aag gcc att gtt gac gcc att gga tgg ggc gag 630
 Arg Glu Gln Ala Lys Ala Ile Val Asp Ala Ile Gly Trp Gly Glu
 200 205 210

gac cca gcc cgc gtc agg ctg ggg acg tcc acc cca gag gct ctt 675
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cta tag 681
 Leu

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 <220>
 <223> Primer for PCR
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<210> 4
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 <212> DNA
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 <220>
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<210> 5
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 <212> DNA
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<210> 6

<211> 30
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<223> Primer for PCR
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<223> Primer for PCR
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taatggatcc ttagtagctg ctggcgctct

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